JALTOMATA WERFII (SOLANACEAE), A NEW SPECIES FROM THE ARCHIPELAGO DE COLON (GALAPAGOS ISLANDS).

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Jaltomata werfii D'Arcy spec. nov. TYPE: Isabela (Albemarle) Island, van der Werff 1503 (MO, isotypes reportedly at CAS and U, neither seen.

Herb to ?1 m tall, stems angular, glabrescent, emergent parts with long, weak, perhaps viscous hairs. Leaves tardily glabrescent, on emerging with scattered, weak, white multicellular simple hairs, ovate, mostly 6-9 cm long, 5-7 cm wide, apically short acuminate, basally deltoid to subtruncate, sometimes somewhat oblique or dimidiate, the margins shallowly and somewhat irregularly sinuately lobed, the lobes (teeth) broadly acuminate, the sinuses rounded; petioles glabrescent, 1/3 to 1/2 as long as the leaf, minutely winged in the apical portion, inserted in pairs at the nodes of branches. Inflorescences 3-4 flowered axillary umbels; peduncle slender, ca. 1 cm long; pedicels ca. 5 mm long, hirsute with long, weak multicellular hairs. Flowers with the calyx ca. 1 cm across (in juvenile fruit), the lobes rounded-acute, apiculate, the sinuses deltoid, the costa prominent, the lobes short pubescent within, the limb glabrate, the calyx copiously pubescent outside; corolla white, rotate, ca. 2 cm across, deltoid lobed, apparently slightly constricted just above the ovary, the lobes and the rim of the ovary constriction ciliate; stamens with the filaments unequal, 2 & 4 mm long in the same flower, glabrous above, ciliolate basally, the anthers ca. 1 mm long.

This species differs from <u>Jaltomata procumbens</u> (Cav.) J. L. Gentry, the widespread species on the American mainland, in its copiously pubescent young parts, its white flowers, orange fruit, and in its unequal stamens. It also tends to have more conspicuously lobed leaves.

<u>Jaltomata</u> has now been collected from three islands in the Galapagos group, and the variability present is striking. The above description, taken from the type specimen, is of a glabrate plant with small flowers and calyces. One collection

^{1 &}lt;u>Jaltomata werfii</u>, herba erecta v. repens. Differt <u>Jaltomatis</u> alteris foliis pubescentibus, corolla alba, ciliata, fructu aurantiaco.

by the Adsersens (940) is a plant copiously pubescent in all parts with calyces ca 2 cm across, very different on overall appearance, and another of their collections (540) is intermediate between the type collection and their collection 940. The genus <u>Jaltomata</u>, which has never been revised, has a wide range of morphology, and for convenience, only one species, <u>J. procumbens</u>, is usually recognized on the mainland, although there would seem to be a number of species actually present. It is therefore expedient to recognize only one species for the Galapagos at this time.

The type collection was made by Henk van der Werff, now at the Missouri Botanical Garden, while on an ecological study of the islands. By letter he reports: "Jaltomata occurs on the upper windward (therefore wet) slopes of Alcedo and Santa Cruz. found it mostly in two habitats. One is along tree fern thickets (Cyathea weatherbyana); such thickets are rare, but Jaltomata was always present. The second habitat is in steep lava holes near the summit of Santa Cruz. The prevailing vegetation in the summit area is evergreen herbaceous--Fern Sedge zone in Wiggins & Porter's Flora (1971) -- but inside these holes a low evergreen vegetation is present. These small forest stands are somewhat different from the vegetation types described by Wiggins & Porter. Presence and abundance of tall ferns (Cyathea, Dennstaedtia, Diplazium and Tectaria) suggest that these forest patches are closely related to the Miconia scrub."

COLLECTIONS SEEN:

FERNANDINA (NARBOROUGH): Uncommon, branched herb, height 50 cm. white flowers, SW part of main caldera rim, small densly vegetated vally, 1350 m, Adsersen & Adsersen 540 (C). Here and there, subshrub, white flowers, accrescent calyx, fruit a globose dark berry, S rim, mixed dry highland forest on S facing slope, 1400 m. Adsersen & Adsersen 940 (2 sheets, C). ISABELA (ALBEMARLE): Corolla white, pubescent; stem thick, juicy at base, slightly creeping and ascending, leaves and calyx pubescent, edge of tree fern thicket, volcano Alcedo, 1020 ft, van der Werff 1503 (MO). SANTA CRUZ (INDEFATIGABLE): Flower white, fruits orange, not common, in sheltered areas near top of main peak, 2075 ft, Bowman 79 (UC). Corolla white, margin of corolla pubescent; stem angular, hollow, slightly creeping and suffrutescent at base, in deep shade in lave hole with dense vegetation, near summit of island, 2200 ft, van der Werff 1352 (MO).

Wiggins, I. L. & D. M. Porter. 1971 Flora of the Galapagos Islands. Stanford Univ. Press.